CLAIMS

1. Biodegradable hydrogel comprising bonds which are hydrolysable under physiological conditions.

2. Hydrogel according to claim 1, consisting of two interpenetrating polymer networks interconnected to one another through hydrolysable spacers.

3. Hydrogel according to claim 1 or 2, being based on crosslinked dextran or a crosslinked derivatized dextran.

4. Hydrogel of any one of the preceding claims, based on a polymer crosslinked with methacrylate units.

5. Hydrogel of any one of the preceding claims, comprising hydrolysable lactate and/or carbonate ester and/or succinic acid and/or ethylene glycol bonds.

6. Method for the preparation of a hydrogel, wherein macromolecules, e.g. polymers, which contain bonds which are hydrolysable under physiological conditions, are crosslinked in an aqueous solution.

7. The method of claim 6, wherein the hydrolysable bonds are derived from lactic acid and/or glycolic acid and/or succinic acid and/or ethylene glycol.

8. The method of claim 6 or 7, wherein a protein drug is present during the crosslinking step.